

IN THE CLAIMS:

Please cancel claims 7, 12 and 13 and amend claims 1 and 8-10 to read as follows:

1. (Currently Amended) An all-electric glass-melting ~~dep~~ deep furnace comprising:

a bottom; and

a side wall constructed by piling up fireproof bricks on the a perimeter of the bottom; said side wall extending upwardly from the perimeter of the bottom, inclining inwardly, thereby being substantially trapezoidal in shape as viewed from the side, and thereby defining an inside lateral dimension of the bottom;

wherein heating electrodes jut from an inner surface of the side wall and pass a current through the molten glass filled inside the side wall, a height of the side wall ~~is~~ twice or more than being at least twice as long as an that of the inside lateral dimension of the bottom, and distances from the heating electrodes to the bottom of the furnace are as long as or longer than being at least equal to the inside lateral dimension of the bottom.

2. (Original) The all-electric glass-melting deep furnace according to claim 1, wherein said side wall extends upwardly from the perimeter of the bottom and is rectangular in shape as viewed from the side.

3. (Previously Presented) The all-electric glass-melting deep furnace according to claim 1, wherein auxiliary electrodes for heating the molten glass by generating smaller amount of heat than said heating electrodes are provided below the heating electrodes, respectively.

4. (Previously Presented) The all-electric glass-melting deep furnace according to claim 1, wherein said heating electrodes are placed at different levels from the bottom of the furnace, respectively.

5. (Previously Presented) The all-electric glass-melting deep furnace according to claim 1, wherein a feeder for discharging the molten glass from the furnace is provided at a lower position than a surface level of the molten glass, depending on a depth of the furnace.

6. (Original) The all-electric glass-melting deep furnace according to claim 5, wherein said molten glass is discharged from said feeder through a throat portion formed in the center of the bottom of the furnace.

7. (Canceled).

8. (Currently Amended) The all-electric glass-melting deep furnace according to claim 7 1, wherein auxiliary electrodes are provided for heating the molten glass by generating a smaller amount of heat than said heating electrodes.

9. (Currently Amended) The all-electric glass-melting deep furnace according to claim 7 1, wherein said heating electrodes are placed at different levels from the bottom of the furnace.

10. (Currently Amended) The all-electric glass-melting deep furnace according to claim 7 5, wherein said feeder for discharging the molten glass from the bottom of the furnace

is provided at a lower position than a surface level of the molten glass, depending on a depth of the furnace.

11. (Original) The all-electric glass-melting deep furnace according to claim 10, wherein said molten glass is discharged from said feeder through a throat portion formed in the center of the bottom of the furnace.

12. (Canceled).

13. (Canceled).